TRANSLATION

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	FOR FURTHER ACTION	See Form PCT/IPEA/416
61205 BM/VB		
International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/FR2004/003012	24.11.2004	18.12.2003
International Patent Classification (IPC) or national classification and IPC		
C02F1/52, C02F1/44		
Applicant		
DEGREMONT		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

   a. ☐ *(sent to the applicant and to the International Bureau)* a total of _____ sheets, as follows:

      ☐ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

      ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

   b. ☐ *(sent to the International Bureau only)* a total of (indicate type and number of electronic carrier(s))

      _____ , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☒	Box No. VII	Certain defects in the international application
☒	Box No. VIII	Certain observations on the international application

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP Facsimile No.	Authorized officer Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/FR2004/003012

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:

☐ international search (Rule 12.3 and 23.1(b))

☐ publication of the international application (Rule 12.4)

☐ international preliminary examination (Rule 55.2 and/or 55.3)

2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

☐ the international application as originally filed/furnished

☒ the description:

pages 1-14 as originally filed/furnished

pages* _____ received by this Authority on _____

pages* _____ received by this Authority on _____

☒ the claims:

nos. 1-9 as originally filed/furnished

nos.* _____ as amended (together with any statement) under Article 19

nos.* _____ received by this Authority on _____

nos.* _____ received by this Authority on _____

☒ the drawings:

sheets 1/2-2/2 as originally filed/furnished

sheets* _____ received by this Authority on _____

sheets* _____ received by this Authority on _____

☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages _____

☐ the claims, nos. _____

☐ the drawings, sheets/figs _____

☐ the sequence listing *(specify)*: _____

☐ any table(s) related to sequence listing *(specify)*: _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages _____

☐ the claims, nos. _____

☐ the drawings, sheets/figs _____

☐ the sequence listing *(specify)*: _____

☐ any table(s) related to sequence listing *(specify)*: _____

* *If item 4 applies, some or all of those sheets may be marked "superseded."*

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/FR2004/003012

Box No. V **Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	3-9	YES
	Claims	1,2	NO
Inventive step (IS)	Claims		YES
	Claims	1-9	NO
Industrial applicability (IA)	Claims	1-9	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

Reference is made to the following documents:

D1: PATENT ABSTRACTS OF JAPAN vol. 0173, no. 88 (C-1086), 21 July 1993

D2: WO01/41906

1. Claims 1 to 9 are not entirely supported by the description, as required by PCT Article 6, since their scope is broader than that justified by the description and the drawings. In particular, the dose of coagulating reagents is not consistent between the claims and the description, which casts doubt on the subject matter for which protection is sought (PCT Article 6). The reasons for this are explained in Box VIII.

2. Consequently, this report has been drawn up without taking into consideration the amount of coagulating reagents used in the method that constitutes the subject matter of the present application.

3. The subject matter of claim 1 is not novel within the meaning of PCT Article 33(2). D1 describes a fluid treatment method that associates the steps of coagulation/flocculation (3, 8), clarification (4) and membrane filtration (9), and comprises a double

injection of coagulating reagents (2, 7) into an area upstream of the clarification step (3) and into a second area located upstream of the membrane filtration step (8).
Consequently, the subject matter of claim 1 is not novel and the requirements of PCT Article 33(1) are not met.

4. The subject matter of claims 1 to 9 contains no feature that meets the PCT requirements of inventive step, for the following reasons:
The difference between the subject matter of claims 1 to 9 and D1 is that of expressing the amount of coagulant used according to the percentage of the optimum coagulation dose. The problem that the present invention is intended to solve can be considered to be that of identifying the optimum dose of coagulant so as to improve the quality of the fluid and reduce the clogging of the membrane. To a person skilled in the art, calculating the optimum amount of coagulant for a particular process is a routine practice when using ordinary tests. Furthermore, D2 describes a method in which the dose of a coagulating reagent is expressed according to the optimum coagulation dose or the dose cancelling the Zeta potential (pZ). It would therefore be obvious for a person skilled in the art to express the amount of coagulant according to the percentage of the optimum dose cancelling the pZ. The solution proposed in the claims of the present application is therefore not considered inventive (PCT Article 33(3)).

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

Contrary to the requirement of PCT Rule 5.1(a)(ii), the relevant prior art disclosed in D1 and D2 has not been indicated in the description, nor have said documents been cited.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/FR2004/003012

Box No. VIII **Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

The independent claim is not entirely supported by the description (PCT Article 6). It is indicated on page 5, lines 23 and 31 and page 6, line 5 of the description that the overall dose of reagent in the method constituting the subject matter of the invention is **less than** the optimum coagulation dose. However, in claim 1 the injection of reagent can reach 125 % of the optimum coagulation dose in the first area and 25 % of the optimum coagulation dose in the second area. This inconsistency between the claims and the description casts doubt on the subject matter for which protection is sought. The independent claim is therefore unclear (PCT Article 6).